

## Certificate of Analysis

|                   |                                             |
|-------------------|---------------------------------------------|
| Product Name      | Hafnium oxide, 99+% (contains max. 0.5% Zr) |
| Glentham Code     | GX2511                                      |
| CAS Number        | 12055-23-1                                  |
| Batch Number      | 836YTB                                      |
| Molecular Weight  | 210.49                                      |
| Molecular Formula | HfO <sub>2</sub>                            |
| Storage Temp.     | +20°C                                       |



| Property                    | Specification                         | Batch 836YTB |
|-----------------------------|---------------------------------------|--------------|
| Physical Description        | White to off-white powder or crystals | White powder |
| Zirconium (Zr)              | ≤ 0.5%                                | 0.3%         |
| Purity (Trace Metals Basis) | ≥ 99.0%                               | >99.0%       |

|                       |            |
|-----------------------|------------|
| Specification Version | v1.0       |
| Manufacture Date      | 2023-01-03 |
| Re-Test Date          | 2029-12-08 |

Glentham Life Sciences confirm that the above referenced product conformed to the information displayed in this document on the quality release date. Please check [www.glentham.com](http://www.glentham.com) or contact us using the details above for the current version of this document.

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